



MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING

## **PRODUCT CONTROL NOTICE OF ACCEPTANCE**

**KML Windows, Inc.**  
**23 Buchanan Court**  
**London, On N5Z 4P9**

**BUILDING CODE COMPLIANCE OFFICE**  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908

**CONTRACTOR LICENSING SECTION**  
(305) 375-2527 FAX (305) 375-2558

**CONTRACTOR ENFORCEMENT DIVISION**  
(305) 375-2966 FAX (305) 375-2908

**PRODUCT CONTROL DIVISION**  
(305) 375-2902 FAX (305) 372-6339

Your application for Notice of Acceptance (NOA) of:

### **Steel Tube Clipped Mullion - Impact**

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

**ACCEPTANCE NO.: 00-1129.03**  
**EXPIRES: 08/23/2006**

Raul Rodriguez  
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL**  
**CONDITIONS**  
**BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.  
Director  
Miami-Dade County  
Building Code Compliance Office

**APPROVED: 08/23/2001**

**KML Windows, Inc.**

**ACCEPTANCE No.:** 00-1129.03

**APPROVED** : AUG 23 2001

**EXPIRES** : AUG 23 2006

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

- 1.1** This approves a clipped mullion system, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code (SFBC), 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

**2. PRODUCT DESCRIPTION**

- 2.1** The **Steel Tube Clipped Mullion - Impact** is a structural member used for top-and-bottom and side-by-side installation. Mullion and its components shall be constructed in strict compliance with the following documents: Drawing No **1003E**, Sheets 1 through 5 of 5, titled "Clipped Impact & Non-Impact Steel Tube Mullions", prepared by W. W. Schaefer Engineering & Consulting, P. A., dated 10/13/00 signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control approval stamp; with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

**3. LIMITATIONS**

- 3.1** This approval applies to structural mullions to be installed vertically or horizontally, as shown in the approved drawings.
- 3.2** This approval applies only to Impact & Non-Impact French Doors, Casement Windows, Sash Glazed Fixed Windows and Direct Glazed Fixed Windows, manufactured by **KML Windows, Inc.** with a current Notice of Acceptance, installed as shown in approved drawings.
- 3.3** Window sizes and design pressures are to be limited only to those appearing on charts and also listed in the individual window's Notice of Acceptance.

**4. INSTALLATION**

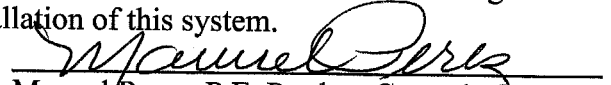
- 4.1** The clipped mullion system and its components shall be installed in strict compliance with the approved drawings.
- 4.2** This mullion can be installed as part of an impact resistant unit.

**5. LABELING**

- 5.1** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved".

**6. BUILDING PERMIT REQUIREMENTS**

- 6.1** Application for building permit shall be accompanied by copies of the following:
- 6.1.1** This Notice of Acceptance, with mullion option indicated.
- 6.1.2** The Notice of Acceptance of each door and/or fixed lite attached to mullion.
- 6.1.3** Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.
- 6.1.4** Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

  
Manuel Perez, P.E. Product Control Examiner  
Product Control Division

**KML Windows, Inc.**

**ACCEPTANCE No.:** 00-1129.03


**APPROVED** : AUG 23 2001

**EXPIRES** : AUG 23 2006

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
  - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
  - b. The product is no longer the same product (identical) as the one originally approved.
  - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
  - d. The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
  - a. Unsatisfactory performance of this product or process.
  - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

**END OF THIS ACCEPTANCE**

  
Manuel Perez, P.E., Product Control Examiner  
Product Control Division

**KML Windows, Inc.**

**ACCEPTANCE No.:** 00-1129.03

**APPROVED** : AUG 23 2001

**EXPIRES** : AUG 23 2006

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**  
***(For File ONLY. Not part of NOA.)***

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **1003E**, Sheets 1 through 5 of 5, titled "Clipped Impact & Non-Impact Steel Tube Mullions", prepared by W. W. Schaefer Engineering & Consulting, P. A., dated 10/13/00 signed and sealed by Warren W. Schaefer, P.E.

**B. TESTS**

1. Test reports on
  - 1) Air Infiltration Test, per SFBC, PA 202-94
  - 2) Uniform Load Static Air Pressure Test, per SFBC, PA 202-94
  - 3) Water Resistance Test, per SFBC, PA 202-94
  - 4) Large Missile Impact Test, SFBC PA 201-94
  - 5) Cyclic Loading Test, per SFBC PA 203-94along with installation diagram of two fixed window mulled units, prepared by Intertek Testing Services, Test Report No. **ITS J99022770-231-09**, dated 10/31/00, signed and sealed by Douglas Keith Tucker, P.E.

**C. CALCULATIONS**

1. Engineering Structural & Anchor Calculations, prepared by W. W. Schaefer, Engineering & Consulting, P.A. dated 10/17/00, signed and sealed by Warren W. Schaefer, P.E.

**D. MATERIAL CERTIFICATIONS**


1. None.

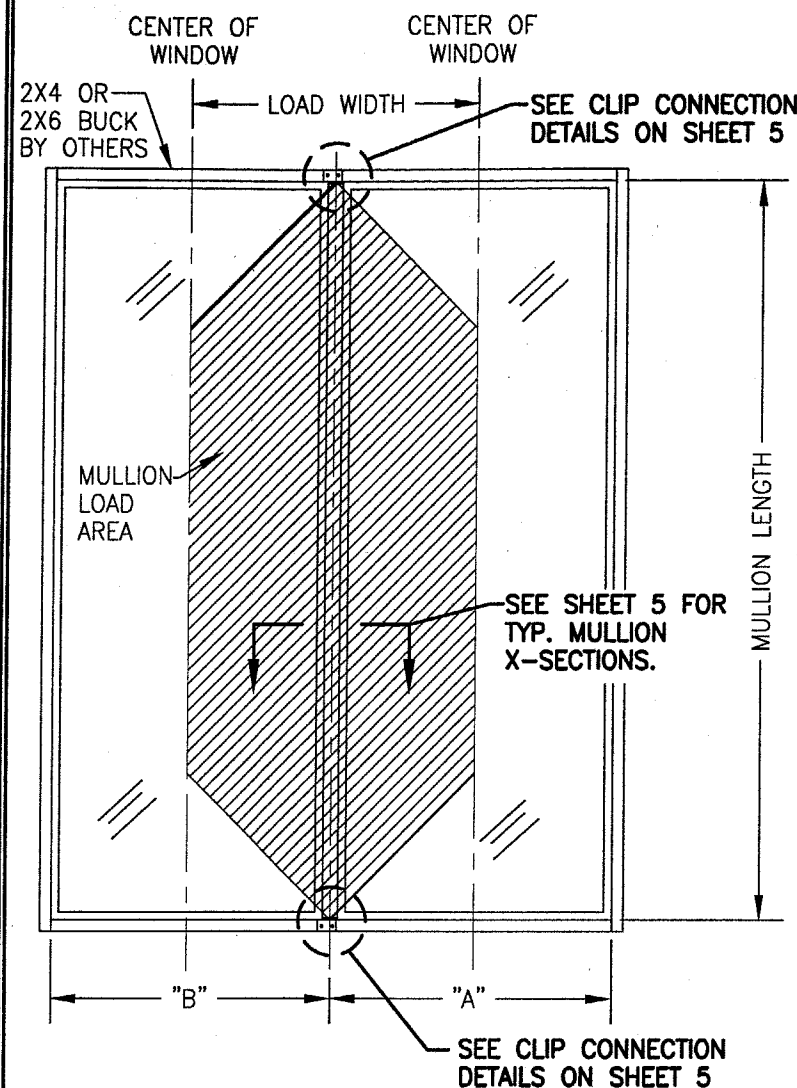
**E. STATEMENTS**

1. Statement letter of conformance, dated October 19, 2000, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated October 19, 2000, signed and sealed by Warren W. Schaefer, P.E.

**F. OTHER**

1. None.

  
Manuel Perez, P.E. Product Control Examiner  
Product Control Division



### FIXED WINDOW TO FIXED WINDOW

$$\text{LOAD WIDTH} = (A + B)/2$$

NOTE: "FIXED WINDOW" MAY BE A SASH GLAZED FIXED OR A DIRECT GLAZED FIXED WINDOW.

NOTE: MULLION MAY BE HORIZONTAL OR VERTICAL

### GENERAL NOTES (ALL DRAWING SHEETS):

- DOORS ARE APPROVED UNDER SEPERATE N.O.A. WITH THE EXTRUDED PLATE MULLION "D" AS AN UN-CLIPPED MULLION. CASEMENT WINDOWS & SASH GLAZED FIXED WINDOWS ARE APPROVED UNDER SEPERATE N.O.A. WITH AN UNREINFORCED JAMB TO JAMB MULLION. SEE THE PRODUCTS SPECIFIC N.O.A. FOR USE OF THESE MULLIONS WHEN THEY APPLY.
- THESE MULLION SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN ON THESE DRAWINGS.
- BUCKING, OPENINGS & BUCKING FASTENERS MUST BE DESIGNED & INSTALLED TO WITHSTAND WIND LOADS AS DETERMINED FOR EA. APPLICATION
- ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
- THESE MULLION SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION.
- THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS PA-201, PA-202 & PA-203 FOR LARGE MISSILE IMPACT, STRUCTURAL & CYCLIC TESTING.

FIXED WINDOW TO FIXED WINDOW TABLE				
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURES (PSF)		
		MULLION "A"	MULLION "B"	MULLION "C"
		(+/-)	(+/-)	(+/-)
60	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	100.0	100.0	100.0
	48	100.0	100.0	100.0
	54	100.0	100.0	100.0
	60	100.0	100.0	100.0
	66	100.0	100.0	100.0
	72	100.0	100.0	100.0
	72	100.0	100.0	100.0
72	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	100.0	100.0	100.0
	48	100.0	100.0	100.0
	54	100.0	100.0	100.0
	60	100.0	100.0	100.0
	66	100.0	100.0	100.0
	72	100.0	100.0	100.0
	72	100.0	100.0	100.0
84	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	100.0	100.0	100.0
	48	100.0	100.0	100.0
	54	100.0	100.0	100.0
	60	100.0	100.0	100.0
	66	100.0	100.0	100.0
	72	100.0	100.0	100.0
	72	100.0	100.0	100.0
96	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	100.0	100.0	100.0
	48	100.0	100.0	100.0
	54	100.0	100.0	100.0
	60	96.0	96.0	96.0
	66	91.4	91.4	91.4
	72	88.0	88.0	88.0
	72	88.0	88.0	88.0

NOTE: INDIVIDUAL UNIT SIZES ARE LIMITED BY THEIR OWN INDIVIDUAL "NOTICE OF ACCEPTANCE"

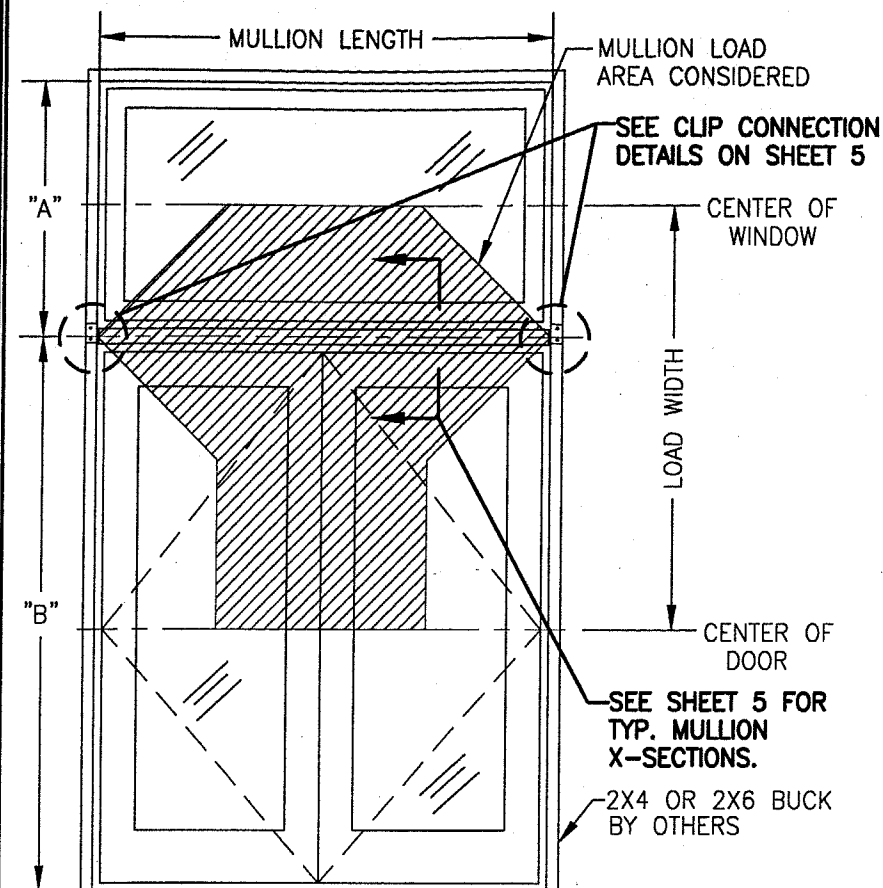
FIXED WINDOW TO FIXED WINDOW TABLE				
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURES (PSF)		
		MULLION "A"	MULLION "B"	MULLION "C"
		(+/-)	(+/-)	(+/-)
108	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	100.0	100.0	100.0
	48	94.3	94.3	94.3
	54	86.9	86.9	86.9
	60	81.2	81.2	81.2
	66	76.8	76.8	76.8
	72	73.3	73.3	73.3
	72	73.3	73.3	73.3
120	24	100.0	100.0	100.0
	30	100.0	100.0	100.0
	36	100.0	100.0	100.0
	42	91.4	91.4	91.4
	48	82.5	82.5	82.5
	54	73.9	75.7	75.7
	60	66.5	70.4	70.4
	66	60.5	66.2	66.2
	72	55.4	62.9	62.9
	72	55.4	62.9	62.9
132	24	100.0	100.0	100.0
	30	99.9	100.0	100.0
	36	83.3	92.6	92.6
	42	71.4	81.5	81.5
	48	62.5	73.3	73.3
	54	55.5	67.0	67.0
	60	50.0	60.6	62.1
	66	45.4	55.0	58.2
	72	41.6	50.5	55.0
	72	41.6	50.5	55.0
144	24	96.2	100.0	100.0
	30	77.0	93.3	98.2
	36	64.1	77.7	83.8
	42	55.0	66.6	73.6
	48	48.1	58.3	66.0
	54	42.8	51.8	60.2
	60	38.5	46.6	55.6
	66	35.0	42.4	51.9
	72	32.1	38.9	48.9
	72	32.1	38.9	48.9

MULLION "A" = 4"x2"x3/16" STEEL TUBE  
MULLION "B" = 4"x2"x1/4" STEEL TUBE  
MULLION "C" = 5"x2"x1/4" STEEL TUBE

- PRODUCTS APPROVED WITH THESE MULLIONS ARE:
  - IMPACT & NON-IMPACT FRENCH DOORS
  - IMPACT & NON-IMPACT CASEMENT WINDOWS
  - IMPACT & NON-IMPACT SASH GLAZED FIXED WINDOWS
  - IMPACT & NON-IMPACT DIRECT GLAZED FIXED WINDOWS
- ALL BUCKING MUST BE RIPPED TO FIT DEPTH REQUIRED BY THE MULLION END CLIPS. (SEE DETAILS ON SHEET 6)
- ALLOWABLE PRESSURE ON THE MULLED UNIT SHALL BE CONTROLLED BY THE LESSER ALLOWABLE PRESSURE OF THE MULLION OR THE INDIVIDUAL DOOR/WINDOW UNITS.
- FOR WINDOW OR DOOR FRAME TO BUCK ATTACHMENT, SEE THE RESPECTIVE PRODUCT APPROVAL DRAWINGS FOR THE WINDOW/DOOR.
- MULLION LENGTHS ARE RESTRICTED BY THOSE SHOWN IN THE TABLES.

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE **AUG 23 2001**  
BY *Manuel*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. **00-1129.03**

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 10/13/00	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE		MANUFACTURER	
CLIPPED IMPACT & NON-IMPACT STEEL TUBE MULLIONS		KML WINDOWS, INC.	
CONSULTANTS		23 BUCHANAN COURT	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		LONDON, ONTARIO, CANADA N5Z4P9	
600 SANDTREE DRIVE, SUITE 203B		519-681-7012	
PALM BEACH GARDENS, FL 33403			
PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION	DATE	REV.	
JUL 17 2001			
DRAWING NO. 1003E		SHEET NO. 1 OF 5	



**DOUBLE DOOR WITH TRANSOM**  
LOAD WIDTH =  $(A + B)/2$

NOTE: "TRANSOM" MAY BE A SASH GLAZED FIXED WINDOW, DIRECT GLAZED FIXED WINDOW OR A FIXED DOOR PANEL.

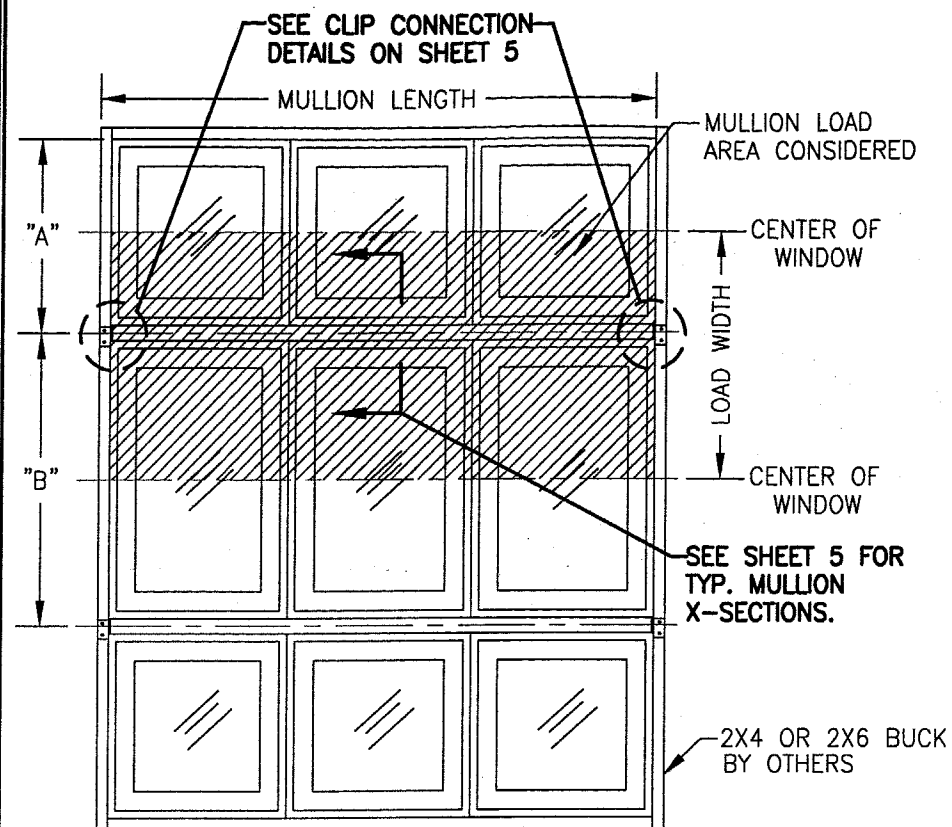
DOUBLE DOOR WITH TRANSOM		
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)
		MULLION "A"
		(+/-)
48	48	100.0
	54	100.0
	60	100.0
	66	100.0
	72	100.0
54	48	100.0
	54	100.0
	60	100.0
	66	100.0
	72	100.0
60	48	100.0
	54	100.0
	60	100.0
	66	100.0
	72	100.0
66	48	100.0
	54	100.0
	60	100.0
	66	100.0
	72	100.0
72	48	100.0
	54	100.0
	60	100.0
	66	100.0
	72	100.0
78	48	96.7
	54	89.8
	60	100.0
	66	100.0
	72	96.7
84	48	100.0
	54	100.0
	60	100.0
	66	98.0
	72	89.8
	78	82.9
	84	77.0

MULLION "A" = MIN. 4"x2"x3/16" STEEL TUBE

NOTE: INDIVIDUAL UNIT SIZES ARE LIMITED BY THEIR OWN INDIVIDUAL "NOTICE OF ACCEPTANCE"

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE **AUG 23 2001**  
BY *Warren W. Schaefer*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. **00-1129.03**

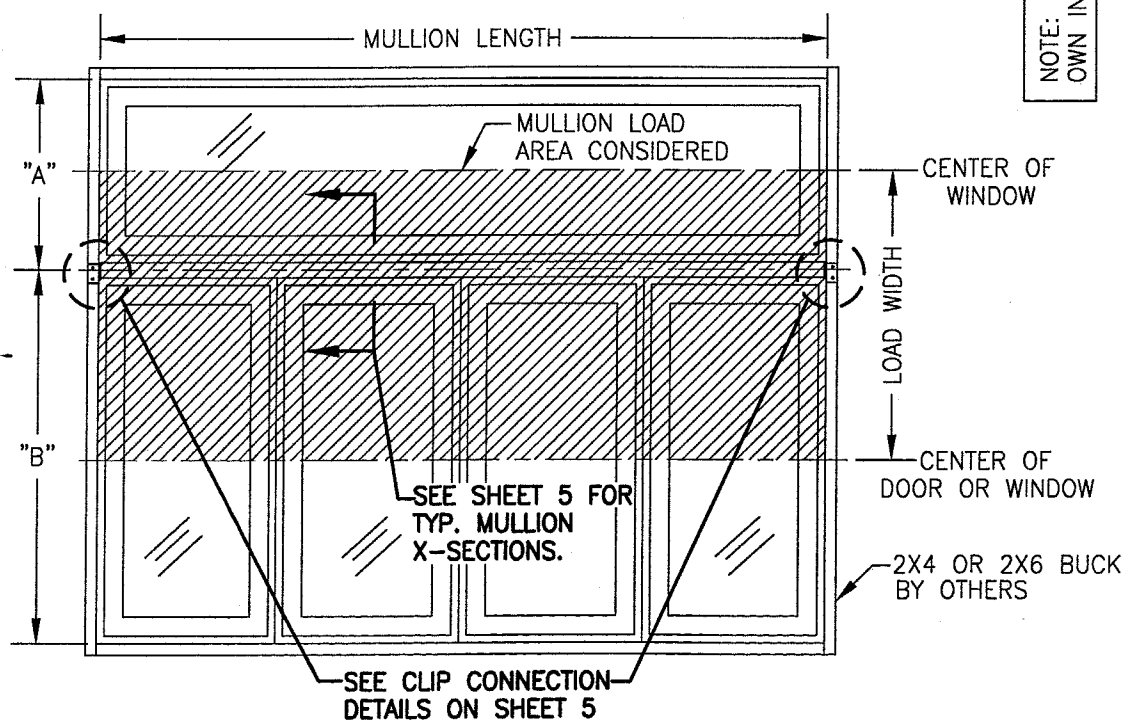
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 10/13/00	
NO.	REVISION	DESCRIPTION	DATE
<p><b>CLIPPED IMPACT &amp; NON-IMPACT STEEL TUBE MULLIONS</b></p> <p>CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903</p> <p>MANUFACTURER <b>KML WINDOWS, INC.</b> 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 519-681-7012</p>			
<p>CERTIFICATION <b>JUL 17 2001</b></p> <p>WARREN W. SCHAEFER, P.E. P.E. NO. 44135</p>		<p>DRAWING NO. <b>1003E</b></p> <p>SHEET NO. <b>2 OF 5</b></p>	



### MULTIPLE WINDOWS (HORIZONTAL MULLION)

$$\text{LOAD WIDTH} = (A + B)/2$$

MULLIONS MAY BE HORIZONTAL OR VERTICAL



### MULTIPLE WINDOWS/DOORS WITH TRANSOM

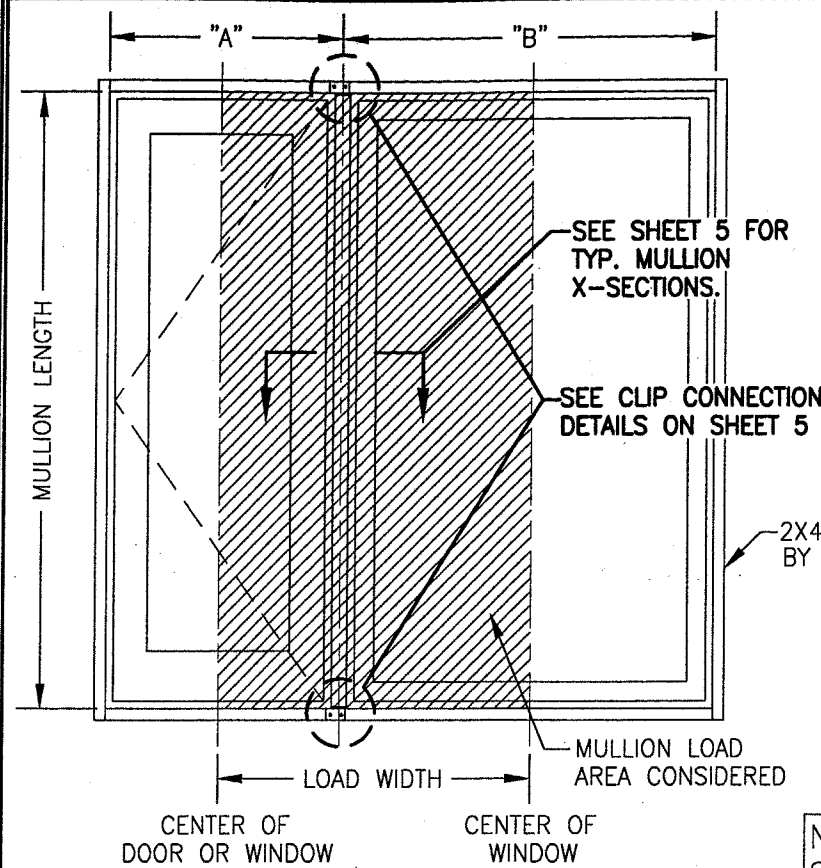
$$\text{LOAD WIDTH} = (A + B)/2$$

TRANSOM MAY BE SINGLE OR MULTIPLE WINDOWS

NOTE: INDIVIDUAL UNIT SIZES ARE LIMITED BY THEIR OWN INDIVIDUAL "NOTICE OF ACCEPTANCE"

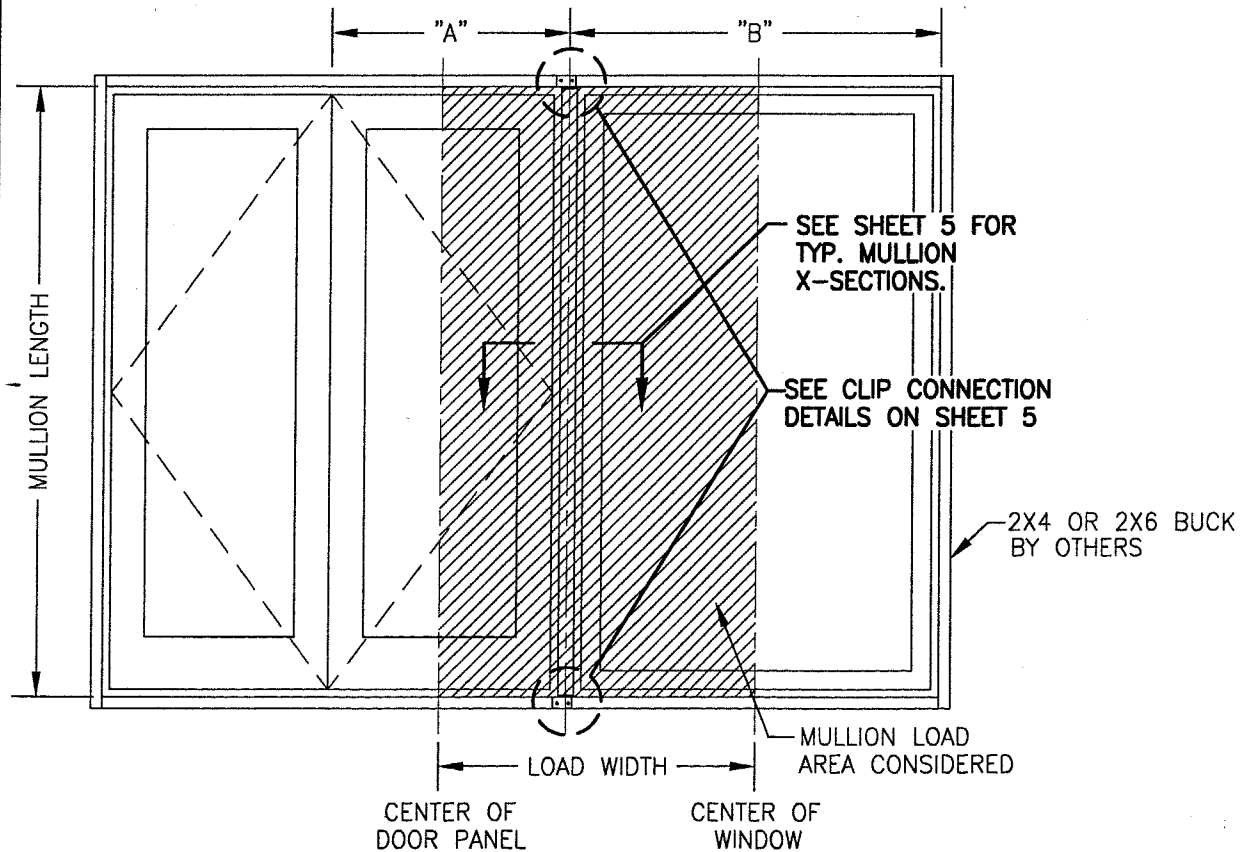
MULTIPLE WINDOWS/DOORS				
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURES (PSF)		
		MULLION "A"	MULLION "B"	
		(+/-)	(+/-)	
36	48	100.0	100.0	
	54	100.0	100.0	
	60	100.0	100.0	
	66	100.0	100.0	
	72	100.0	100.0	
	78	100.0	100.0	
48	36	100.0	100.0	
	42	100.0	100.0	
	48	100.0	100.0	
	54	100.0	100.0	
	60	100.0	100.0	
	66	100.0	100.0	
	72	100.0	100.0	
60	78	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	100.0	100.0	
	54	100.0	100.0	
	60	100.0	100.0	
	66	96.0	96.0	
72	72	88.0	88.0	
	78	81.2	81.2	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	100.0	100.0	
	54	97.8	97.8	
	60	88.0	88.0	
84	66	80.0	80.0	
	72	73.3	73.3	
	78	67.7	67.7	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	94.3	94.3	
	54	83.8	83.8	
96	60	75.4	75.4	
	66	68.6	68.6	
	72	62.9	62.9	
	78	58.0	58.0	
	24	100	100	
	30	100	100	
	36	100	100	
	42	94.3	94.3	
	48	82.5	82.5	
108	54	73.3	73.3	
	60	66.0	66.0	
	66	60.0	60.0	
	72	55.0	55.0	
	78	50.8	50.8	
	120	24	100.0	100.0
		30	100.0	100.0
		36	100.0	100.0
		42	100.0	100.0
48		97.8	97.8	
54		88.0	88.0	
60		80.0	80.0	
66		73.3	73.3	
72		67.7	67.7	
132	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	94.3	94.3	
	54	83.8	83.8	
	60	75.4	75.4	
	66	68.6	68.6	
144	72	62.9	62.9	
	78	58.0	58.0	
	24	100	100	
	30	100	100	
	36	100	100	
	42	94.3	94.3	
	48	82.5	82.5	
	54	73.3	73.3	
	60	66.0	66.0	
156	66	60.0	60.0	
	72	55.0	55.0	
	78	50.8	50.8	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
168	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
180	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
192	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
204	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
216	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
228	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
240	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
252	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
264	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
276	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
288	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
300	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
312	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
324	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
336	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
348	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
360	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
372	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
384	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
396	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
408	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
420	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
432	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
444	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
456	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
468	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
480	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
492	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
504	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
516	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
528	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
	48	97.8	97.8	
540	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
	42	100.0	100.0	
552	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
	36	100.0	100.0	
564	42	100.0	100.0	
	48	97.8	97.8	
	54	88.0	88.0	
	60	80.0	80.0	
	66	73.3	73.3	
	72	67.7	67.7	
	78	62.9	62.9	
	24	100.0	100.0	
	30	100.0	100.0	
576				





**SINGLE DOOR OR CASEMENT WITH SIDELIGHT**  
LOAD WIDTH = (A + B)/2

NOTE: "SIDELIGHT" MAY BE A SASH GLAZED FIXED WINDOW, A DIRECT GLAZED FIXED WINDOW, OR A FIXED DOOR PANEL.



**DOUBLE DOOR WITH SIDELIGHT**  
LOAD WIDTH = (A + B)/2

DOOR WITH SIDELIGHT		
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)
		MULLION "A"
		(+/-)
48	36	100.0
	42	100.0
	48	100.0
	54	100.0
	60	100.0
54	30	100.0
	36	100.0
	42	100.0
	48	100.0
	54	100.0
60	30	100.0
	36	100.0
	42	100.0
	48	100.0
	54	100.0
66	24	100.0
	30	100.0
	36	100.0
	42	100.0
	48	100.0
72	24	96.0
	30	100.0
	36	100.0
	42	100.0
	48	100.0
78	24	97.8
	30	88.0
	36	100.0
	42	100.0
	48	100.0
80	24	90.3
	30	81.2
	36	100.0
	42	100.0
	48	99.0
84	54	88.0
	60	79.2

DOOR WITH SIDELIGHT		
LENGTH (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (PSF)
		MULLION "A"
		(+/-)
84	24	100.0
	30	100.0
	36	100.0
	42	100.0
	48	94.3
96	54	83.8
	60	75.4
	24	100.0
	30	100.0
	36	100.0
96	42	94.3
	48	82.5
	54	73.3
96	60	66.0

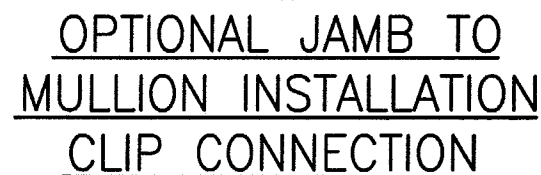
MULLION "A" = MIN. 4"x2"x3/16" STEEL TUBE

NOTE: INDIVIDUAL UNIT SIZES ARE LIMITED BY THEIR OWN INDIVIDUAL "NOTICE OF ACCEPTANCE"

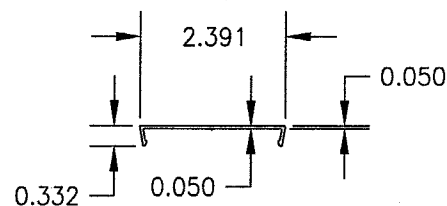
APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE **AUG 23 2001**  
BY *Warren W. Schaefer*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. **00-1129.03**

DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-24		DATE: 10/13/00	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE <b>CLIPPED IMPACT &amp; NON-IMPACT STEEL TUBE MULLIONS</b>		MANUFACTURER <b>KML WINDOWS, INC.</b> 23 BUCHANAN COURT LONDON, ONTARIO, CANADA N5Z4P9 519-681-7012	
CONSULTANTS <b>W. W. SCHAEFER ENGINEERING &amp; CONSULTING, P.A.</b> 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903		CERTIFICATION <b>JUL 17 2001</b> <i>Warren W. Schaefer</i> WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. <b>1003E</b>		REV.	
SHEET NO. <b>4</b>		OF <b>5</b>	





TYP. FOR ALL PRODUCTS APPROVED  
WITH CLIP INSTALLATION.



① MULLION CAP  
6063-T5 ALUMINUM

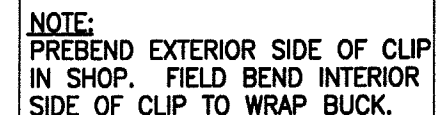
**WHEN ONE PRODUCT IS MULLED  
TO ANOTHER PRODUCT, THE JAMBS  
SHALL BE FASTENED TO THE MULLION  
AS SHOWN IN THE PRODUCT MULLION  
DETAILS ON THIS SHEET.**



A36 MIN. GALV. STEEL  
THICKNESS = 12 GAGE

**NOTE:**  
ANY ADDITIONAL FASTENERS REQUIRED BY THE  
INDIVIDUAL DOOR OR WINDOW N.O.A. (EX: STRIKE  
OR HINGE FASTENERS TO BUCK) SHALL BE  
REPLACED WITH AN EQUAL SIZE TEK SCREW  
FOR PENETRATION INTO THE MULLION.

**NOTE "A":**  
WHEN CLIP IS USED WITH THE TUBE MULLIONS,  
THE 7.697" LONG CLIP MAY BE USED WITH A  
2X4 BUCK PROVIDING 3/4" IS CUT OFF INSIDE  
END OF CLIP PER THE CLIP DETAIL ON SHEET  
5. THE 8.75" LONG CLIP MAY BE USED WITH  
A FULL 2X6 BUCK WITHOUT CUTTING CLIP.



MULLION END  
CONNECTION DETAIL

NOTE: THIS CONNECTION IS ALSO APPLICABLE FOR A TUBE TO TUBE CONNECTION EXCEPT THAT THE NO. 10 SMS INTO THE BUCK SHALL BE NO. 10 TEK SCREWS INTO THE TUBE.

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE AUG 23 2001  
BY Manuel Perez  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 00-1129.03

[illegible]